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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/595,451

02/19/2007

Stefan Portner

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EXAMINER

GIMIE, MAHMOUD

ART UNIT

PAPER NUMBER

3747

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/595,451	<b>Applicant(s)</b> PORTNER ET AL.	
	<b>Examiner</b> Mahmoud Gimie	<b>Art Unit</b> 3747	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/20/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the high pressure accumulator embodied in the form of a ring must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Djordjevic (US 6,345,609).

Djordjevic discloses a high pressure radial piston pump (18) for common rail injection systems comprising: a pump housing (34), - a drive shaft (38) - at least one pump piston (44), which can move in a radial direction in relation to the drive shaft and - a high pressure accumulator (22) integrated into the high pressure radial piston pump (18), wherein the high pressure accumulator (22) is embodied in the form of a ring; figure 1.

Regarding claim 2, wherein the high pressure accumulator (22) is arranged concentric in relation to the drive shaft (38).

Regarding claim 3, wherein the high pressure accumulator (22) is formed by a ring groove realized in the pump housing at the front side and sealed with a cover.

Regarding claim 4, wherein at least one metallic sealing surface is formed on the pump housing and/or on the cover (74) in order to seal the high pressure accumulator (22); see figures 3 and 4.

Regarding claim 5, wherein characterized in that the cover (74) is connected to the pump housing (34) at least by means of one central screw (40) arranged concentric in relation to the ring groove.

Regarding claim 6, wherein characterized in that the high pressure accumulator (22) is embodied as a ring groove which is realized in the outer circumference of a rotationally symmetrical pump insert

Regarding claim 7, wherein the outer circumference of the pump insert operates together with a corresponding inner circumference surface of the pump housing.

Regarding claim 8, wherein the pump insert (74) is embodied in cylindrical form.

Regarding claim 9, comprising there is at least one high pressure connection (24) embodied on the high pressure accumulator (22) in order to supply at least one injector (26) of an internal combustion engine.

Regarding claim 10, wherein the high pressure accumulator (22) is effectively connected with a pressure control valve (52, 54) integrated into the high pressure radial piston pump or arranged on the high pressure radial piston pump.

Regarding claim 11, Djordjevic discloses a high pressure radial piston pump (18) for common rail injection systems comprising: - a pump housing (34), a drive shaft (38), at least one pump piston (44), which can move in a radial direction in relation to the drive shaft and - a ring shaped high pressure accumulator (22) integrated into the high pressure radial piston pump.

Regarding claim 12, wherein the ring shaped high pressure accumulator (22) is arranged concentric in relation to the drive shaft (34).

Regarding claim 13, wherein the ring shaped high pressure accumulator is formed by a ring groove realized in the pump housing (34) at the front side and sealed with a cover (74).

Regarding claim 14, wherein at least one metallic sealing surface is formed on the pump housing and/or on the cover (74) in order to seal the ring shaped high pressure accumulator.

Regarding claim 15, wherein the cover is connected to the pump housing at least by means of one central screw arranged concentric in relation to the ring groove.

Regarding claim 16, wherein the ring shaped high pressure accumulator (22) is embodied as a ring groove which is realized in the outer circumference of a rotationally symmetrical pump insert.

Regarding claim 17, wherein the outer circumference of the pump insert operates together with a corresponding inner circumference surface of the pump housing.

Regarding claim 18, wherein the pump insert is embodied in cylindrical form.

Regarding claim 19, comprising at least one high pressure connection embodied on the ring shaped high pressure accumulator in order to supply at least one injector of an internal combustion engine.

Regarding claim 20, wherein the ring shaped high pressure accumulator (22) is effectively connected with a pressure control valve (52, 54) integrated into the high pressure radial piston pump (18) or arranged on the high pressure radial piston pump.

### ***Response to Arguments***

4. Applicant's arguments filed 4/18/2008 have been fully considered but they are not persuasive.

(i) Applicants argued that Djordjevic does not disclose the high-pressure accumulator embodied in the form of a ring, as claimed. Applicants also argued as shown in figures 1 and 2 the high-pressure accumulator has the form of a ring, which is in a full circle and per definition does not have a beginning or end.

This argument is not persuasive because (a) figures 1 and 2 do not show a high-pressure accumulator in the form of a ring which is in a full circle. The figures, despite their vagueness, may be argued to show an open ring accumulator. (b) Djordjevic, as admitted by applicants, discloses an open ring high-pressure accumulator (22).

(ii) Applicants argued with respect to the objections to the drawings that figures 1 and 2 show the structure of the accumulator 4 embodied in the form of a ring as is common in technical drawings.

This argument is not persuasive because the drawings do not clearly show the high-pressure accumulator 4 embodied in the form of a ring as claimed. The prior art such the relied on prior art of Djordjevic shows, for instance, the technical drawings with clarity as required by 37 CFR 1.121(d). Applicants' drawings on the other hand are vague, incomplete and fail to disclose the claimed subject matter.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahmoud Gimie whose telephone number is 571-272-4841. The examiner can normally be reached on Monday-Friday between 7 a.m. -3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen K. Cronin can be reached on 571-272-4536. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MG/  
/Mahmoud Gimie/  
Primary Examiner, Art Unit 3747